Bibliometrics Analysis Report

A bibliometric analysis of tourists' experience and happiness in tourism (2000-2024)

Author1 Chungil Chae* (corresponding author)

Mon, 3 March 2025

Ver1.0

6 Overview of the Report

- 7 Bibliometrics
- 8 Overview

1

- 9 Main Information
- 10 Description

11

12

19

20

21

22

24

25

- Timespan and Growth:
 - The dataset spans from 1992 to 2025 with an annual growth rate of 12.59%.
 - There are 1553 documents contributing to this dataset.
- Document Metrics:
 - Average citations per document is 30.05, indicating a relatively high citation impact.
 - **Document Average Age** is **4.37 years**, suggesting many publications are relatively recent.
 - A total of **70,323 references** were cited across all documents.
- Keywords:
 - Keywords Plus (ID) total 2269, while Author's Keywords (DE) total 4512.
 - This indicates a broad range of topical coverage and suggests authors employ a wide variety of terms to describe their work.

Description	Results
MAIN INFORMATION ABOUT DATA	NA
Timespan	1992:2025
Sources (Journals, Books, etc)	92
Documents	1553
Annual Growth Rate %	12.59
Document Average Age	4.37
Average citations per doc	30.05
References	70323
DOCUMENT CONTENTS	NA
Keywords Plus (ID)	2269
Author's Keywords (DE)	4512
AUTHORS	NA
Authors	3258
Authors of single-authored docs	146
AUTHORS COLLABORATION	NA
Single-authored docs	160
Co-Authors per Doc	3.02
International co-authorships %	39.73
DOCUMENT TYPES	NA
article	1359
article; early access	124
article; proceedings paper	2
article; retracted publication	1
editorial material; early access	1
review	60
review; early access	6

Authors and Collaboration:

 There are 3258 authors in total. Of these, 146 are authors of single-authored documents, and there are 160 single-authored documents.

- The average Co-Authors per Document is 3.02, showing moderate teamwork on publications.

39.73% of the documents involve international co-authorship, highlighting a significant level of global collaboration.

Document Types:

- The majority are **articles** (1359), followed by:
 - * article; early access: 124
 - * review: 60
 - * review; early access: 6
 - * Smaller numbers for proceedings papers, editorial material, and one retracted publication.

43 Interpretation

26

27

28

31

32

33

34

35

36

38

40

42

45 46

47

48

50

51

53

54

56

57 58

59

61

63

64

- The **robust annual growth rate (12.59%)** from 1992 to 2025 reflects an expanding research area, with increasing numbers of publications.
- The relatively **young average age (4.37 years)** of the documents implies that the field is actively publishing new studies or is experiencing a surge of recent interest.
- A high average citation rate (30.05) points to the significance or influence of these studies, indicating that the research outputs are resonating within the scholarly community.
- The large number of references (70,323) suggests that authors are building upon extensive prior knowledge, indicative of a well-established research base.

• Collaboration metrics:

- An average of **3.02 co-authors per document** indicates moderate teamwork among researchers.
- 39.73% international co-authorship underscores a noteworthy global dimension to this research area, suggesting both the relevance and collaborative nature of the topic.
- The **predominance of articles** shows that the main mode of dissemination is through empirical or theoretical research papers, while the presence of **reviews** (66 in total) indicates ongoing efforts to synthesize existing knowledge.

Conclusion & Summary

66 Overall, these findings reveal a dynamically growing field with a steady increase in publications over

- the past few decades. High citation averages and a diverse, global collaborative network underscore
- the field's academic importance. The dominance of articles among document types and the variety in
- 69 **keywords** highlight broad research engagement and topical exploration.
- ⁷⁰ In summary, the field demonstrates strong growth, collaborative spirit, and robust impact in terms of
- citation—signaling a vibrant and evolving scholarly community.
- **72 Annual Scientific Production**
- 73 Description
- 74 Interpretation
- 75 Conclusion & Summary
- **76 Average Citations per Year**
- 77 Description
- 78 Interpretation
- 79 Conclusion & Summary
- 80 Three-Field Plot
- 81 Description
- 82 Interpretation
- 83 Conclusion & Summary

- 84 Sources
- 85 Most Relevant Sources
- 86 Description
- 87 Interpretation
- 88 Conclusion & Summary
- 89 Most Local Cited Sources
- 90 Description
- 91 Interpretation
- 92 Conclusion & Summary
- 93 Bradford's Law
- 94 Description
- 95 Interpretation
- 96 Conclusion & Summary
- 97 Sources' Local Impact
- 98 Description
- 99 Interpretation
- 100 Conclusion & Summary
- 101 Sources' Production over Time
- 102 **Description**
- 103 Interpretation
- 104 Conclusion & Summary

- 105 Authors
- 106 Authors
- 107 Most Relevant Authors
- 108 Description
- 109 Interpretation
- 110 Conclusion & Summary

Most Local Cited Authors

- The provided bibliometric analysis focuses on "most local citations" related to the field. "Local citations" typically refer to the number of times an author's work is cited by other works within a specific dataset or
- 114 field of study.
- 115 Description
- 116 Interpretation
- 117 Conclusion & Summary

118 Authors' Production over Time

- This bibliometric analysis reflects the scholarly publications on the topic by various authors over the years.
- Let's elaborate on the results, particularly focusing on the "authors' production over time":
- 121 Description
- 122 Interpretation
- 123 Conclusion & Summary
- 124 Lotka's Law
- Lotka's Law is a fundamental principle in bibliometrics and scientometrics, which are fields concerned with the quantitative study of scientific and technological literature. Named after Alfred J. Lotka, who proposed the idea in 1926, this law describes the frequency with which authors publish in a particular field.
- Lotka's Law can be represented mathematically as:

$$Y = \frac{C}{X^{\alpha}}$$

• Where:

130

131

- \$ Y \$ is the number of authors making \$ X \$ contributions
- \$ C \$ is a constant (it describes the number of authors making only one contribution)

- \$ □\$ is a constant usually close to 2 (though it can vary depending on the discipline).
- Interpretation of Lotka's Law:
 - 1. **Majority Publishes Once**: A large number of authors will have only one publication, which corresponds to the value of \$ C \$.
 - 2. **Decrease in Frequency**: As the number of publications per author (i.e., productivity) increases, the number of authors who have published that many times decreases, and this decrease is very sharp (often described as an inverse square law).
 - 3. **Few Prolific Authors**: Only a very small number of authors will be responsible for a large portion of the publications in a particular field. This can be thought of as the "80-20" principle, where a minority (often around 20%) of authors produce the majority (around 80%) of the work.

• Application:

132

133

134

135

136

137

138

139

140

141

142

143

144

145

149

151

152

153

154

155

156

157

162

163

164

165

166

167

- Identify Core Authors: By applying Lotka's Law, organizations and researchers can identify
 the core authors or the most prolific contributors in a particular field or topic.
- Analysis of Scientific Output: Lotka's Law can be utilized to analyze the scientific output of a field, helping in recognizing the distribution of productivity among authors.
- Research Evaluation: Research institutions might use this principle to evaluate the research
 output of their faculty or departments, understanding the distribution of prolific authors versus
 those who publish less frequently.

It's worth noting that while Lotka's Law provides a useful general observation about scientific productivity, there are variations depending on the specific scientific discipline or field of study. The values of \$ C \$ and \$ alpha \$ might differ across disciplines, and in some cases, other bibliometric models might offer a better fit to the data.

- Measurement for the Lotka's law is the following:
 - N.Articles: This is the number of articles written by an author.
 - N.Authors: This is the number of authors who have written the corresponding N.Articles.
 - Freq: This is the frequency (proportion) of those authors relative to the total number of authors.

158 Description

159 Interpretation

Conclusion & Summary

161 Authors' Local Impact

- The followings are the measurement of the local impact
 - Element: Name of the author.
 - h_index: h-index of the author, which represents the maximum number of articles an author has written that have received at least the same number of citations.
 - g_index: g-index of the author, a metric that takes into account the distribution of citations received by a researcher's publications.

- m_index: Rate of acquiring h-index points. It is calculated by dividing the h-index by the number of years since the first published paper of the author.
 - TC: Total citations the author has received.
 - NP: Number of publications by the author.
 - PY_start: The year of the author's first publication.

173 Description

170

172

174 Interpretation

175 Conclusion & Summary

76 Affiliations

Most Relevant Affiliations

The data provided is a bibliometric analysis focusing on the affiliations that have contributed to research related to psychological entitlement. Bibliometric analyses help understand the research landscape of a specific topic by evaluating the academic output from various institutions. The data lists different university systems and universities with the number of articles they've published on the topic.

182 Description

- 183 Interpretation
- 184 Conclusion & Summary

185 Affiliations' Production over time

- The table provided represents a bibliometric analysis of the production of articles related across different universities and university systems over a span of approximately two decades. Here's an elaboration and interpretation of the results for each institution:
- 189 Description
- 190 Interpretation
- 191 Conclusion & Summary

192 Countries

193 Corresponding Author's Countires

The data presented offers a bibliometric analysis of psychological entitlement based on the country of the corresponding author. Here's an interpretation and elaboration of the results:

- 196 Description
- 197 Interpretation
- 198 Conclusion & Summary
- 199 Countries' Scientific Production
- 200 Description
- 201 Interpretation
- 202 Conclusion & Summary
- 203 Countires' Production over Time
- 204 Description
- 205 Interpretation
- 206 Conclusion & Summary
- 207 Most Cited Countries
- 208 Description
- 209 Interpretation
- 210 Conclusion & Summary

- 211 Documents
- 212 Documents
- 213 Most Global Cited Documents
- 214 Description
- 215 Interpretation
- 216 Conclusion & Summary
- **Most Local Cited Documents**
- 218 Description
- 219 Interpretation
- 220 Conclusion & Summary

221 Cited References

- 222 Most Local Cited References
- 223 Description

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

248

249

250

251

252

253

- 224 Interpretation
- 225 Conclusion & Summary

References Spectroscopy

When we talk about "References Spectroscopy" in the context of bibliometrics, we are drawing an analogy with the spectroscopic techniques used in the physical sciences to analyze materials based on the spectrum of the radiation they emit or absorb.

- Reference Spectrum: Just as a material has a unique spectrum in physical spectroscopy, a research
 paper or topic will have a unique "spectrum" of references it cites. This spectrum can give insight into
 the foundational works for that paper or topic, indicating which previous works are most influential
 or relevant.
- Analysis: By examining the "spectra" (or citation patterns) of multiple papers or topics, one can identify trends, clusters, and gaps in the research landscape. This is analogous to how one might use spectroscopy to categorize and analyze different materials based on their spectral signatures.
- Evolution Over Time: Just as the spectrum of a star can tell us about its age and stage in the lifecycle, looking at the changing citation patterns or "spectra" over time can reveal how a field or topic has evolved. It can show which works have become foundational over time or which ones have fallen out of favor.
- Intensity & Peaks: In physical spectroscopy, the intensity of certain peaks in a spectrum can indicate the concentration of specific elements or compounds. Similarly, in bibliometrics, certain references might be cited much more frequently than others, indicating their centrality or importance to the field. These "peaks" in the citation spectrum can point to seminal works or pivotal authors in a domain.
- Comparative Analysis: By comparing the "spectra" of different papers, topics, or even researchers, one can identify overlaps, synergies, and distinctions. This can be useful for interdisciplinary research, collaboration opportunities, or understanding the landscape of a broad field.
- Anomalies & Outliers: Sometimes, a spectrum will have unexpected peaks or features. In bibliometrics, unexpected citation patterns might indicate emerging areas of interest, interdisciplinary bridges, or even issues like citation cartels or excessive self-citation.
- Application: Just as spectroscopy has practical applications in material identification, quality control, and more, bibliometric "spectroscopy" can be used for research evaluation, funding allocation, curriculum design, and other academic or research management tasks.

In essence, the concept of "References Spectroscopy" in bibliometrics is a metaphorical way of describing the deep analysis of citation patterns to understand the structure, evolution, and dynamics of scholarly research.

The "Reference publication year spectroscopy" (RPYS) is a method to analyze the age of cited references in a given publication set. It can reveal the seminal works and foundational literature within a topic or domain.

- Let's break down and interpret the given data on the bibliometric analysis:
- 260 Description
- 261 Interpretation
- 262 Conclusion & Summary

263 Words

264 Most Frequent Words

The provided data lists the most relevant words and their occurrences in a bibliometric analysis related to

- the topic.
- 267 **Description**
- 268 Interpretation
- 269 Conclusion & Summary

270 Words' Frequency over Time

- The provided table offers a bibliometric analysis of the frequency of specific words related to the topic over
- 272 a span of two decades.
- 273 Description
- 274 Interpretation
- 275 Conclusion & Summary
- 276 Trend Topics
- 277 Description
- 278 Interpretation
- 279 Conclusion & Summary

280 Clustering

284

285

286

287

290

291

292

293

281 Clustering by Coupling

Bibliometric coupling occurs when two documents reference a common third document in their bibliographies. It's a method used to understand and visualize the intellectual structure of a scientific field.

• Table 1 Parameters:

- Analysis of Documents using the CR (Cited References) field.
- The analysis uses a single word (ngram = 1) as a term.
- The labeling term used is 'ID'.
- The impact measure is local, meaning the citation scores are specific to this dataset and do not refer to global scores.
- Stemming is set to false, which means words in their base form were not merged (e.g., 'running', 'runner', and 'ran' are treated as distinct words).
- The size of 0.3 might refer to the size of the nodes or clusters in a visualization (if one exists).
- Community repulsion and repel are both set to zero or false, which means there is no repulsion force in the clustering process. This could have implications for the layout of a network visualization.
- Walktrap is the clustering method used. Walktrap is a method that identifies communities (or clusters) in networks by simulating random walks.

298 Description

299 Interpretation

300 Conclusion & Summary

301 Conceptual Structure

- 302 Network Approach
- 303 Co-occurence Network
- 304 Description
- 305 Interpretation
- 306 Conclusion & Summary

307 Thematic Map

- Based on the provided data, it appears to be a bibliometric analysis of the term. Bibliometric analysis is used to quantify and analyze published literature on a particular topic, often to identify the most prevalent themes, authors, and journals. The data seems to be organized in a thematic map, detailing the occurrences and relevance of certain words or terms associated with the topic.
- 312 Description
- 313 Interpretation
- 314 Conclusion & Summary
- 315 Thematic Evolution
- 316 Description
- 317 Interpretation
- 318 Conclusion & Summary

Factorial Approach

320 Factorial Analysis

Factorial analysis is a statistical method used to identify the underlying relationships among a set of vari-

- ables. Here, you've presented data for words (probably representing research themes or keywords) and
- documents (probably representing research papers) in two different dimensions (Dim.1 and Dim.2).
- Description 324
- 325 Interpretation
- 326 Conclusion & Summary

327 Intellectual Structure

- 328 Co-citation Network
- 329 **Description**
- 330 Interpretation
- 331 Conclusion & Summary
- 332 Historiograph
- 333 Description
- 334 Interpretation
- 335 Conclusion & Summary

336 Social Structure

337 Collaboration Network

- The given data presents a bibliometric analysis of the author collaboration network on the topic. The metrics
- included are betweenness, closeness, and PageRank. Let's delve into an interpretation of the results:
- 340 Description
- 341 Interpretation
- 342 Conclusion & Summary

343 Countries' Collaboration World Map

- The dataset offers a broad view of the collaborations between countries in the field. The frequencies indicate
- the number of times scholars from two countries have co-authored papers. In this case, the majority of
- collaborations have a frequency of 1, meaning that many pairs of countries have collaborated once.
- 347 Description
- 348 Interpretation
- 349 Conclusion & Summary

Discussion of the bibliometrics

- Relevant Arguments:
- Potential Research Questions:
- Interdisciplinary Implications:
- Methodological Challenges and Innovations:

Conclusion of the bibliometrics

Report TOPIC MODELING

356	Topic Modeling
357	Preprocessing
358	Optimal K
359	Modeling
360	Final Model Modeling
361	Final Model Validation
362	Effect
363	Findings (Main)
364	Topic Result
365	Proportion
366	Topic Comparision
367	Topic Labeling
368	Initial Label
369	Update Label from User
370	Additional Findings (Analysis with Covariates)
371	Covariate (time)
372	Covariate (Categorical)

Covariate (Interaction Term)

Topic Network Analysis

LDAVIS

Report TOPIC MODELING

- Discussion of the Topic Modeling
- **Relevant Arguments:**
- **Potential Research Questions:**
- **Three discussion points:**
- 380 Discussion point1
- Discussion point2
- Discussion point3
- **Conclusion of the Topic Modeling**

Report DISCUSSION

Discussion

Report REFERENCES

Conclusion Conclusion

386 References